PADEMANN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of:

Hans Josef RINNINGER

Appln. No. 09/826,414

Filed: April 5, 2001

For: SHAPED PAVESTONE

Art Unit: 3673

Examiner: R. Addie

Atty. Docket No. 31530-171041

Customer No. 26694
PATENT TRADEMARK OFFICE

SUPPLEMENTAL BRIEF ON APPEAL

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In response to the Appeal Brief filed on January 21, 2004, the Examiner issued a non-final Office Action. Claims 1-23 are pending. Claims 1-8 and 12-23 stand rejected. Claims 9-11 were not treated by the Examiner.

I. Issues Presented

The following issues are presented:

- 1) whether the Examiner erred in rejecting Claims 1, 2, 5-8, 12-15, and 18-23 under 35 U.S.C. § 102 as being unpatentable over McClintock in view of Rinninger '257;
- 2) whether the Examiner erred in rejecting Claims 3 and 16 under 35 U.S.C. § 103 as being unpatentable over McClintock in view of Rinninger '257, and further in view of Scheiwiller '417; and

3) whether the Examiner erred in rejecting Claims 3, 4, 16, and 17 under 35

U.S.C. § 103 as being unpatentable over McClintock in view of Rinninger '257, and

further in view of Scheiwiller '498.

Issue 1) is treated in the Appeal Brief filed on January 21, 2004, and that

treatment is reproduced in the present Brief. Other portions of the earlier brief are

referred to herein.

II. Grouping of Claims

The grouping of claims is as it was in the Appeal Brief filed on January 21, 2004.

III. Argument

1) Whether the Examiner erred in rejecting Claims 1, 2, 5-8, 12-15, and 18-23 under 35 U.S.C. § 102 as being unpatentable over McClintock

in view of Rinninger '257.

Independent Claims 1 and 14 are directed to a molded block for a paving-stone

covering having, among other structure, approximately the shape of a cube, wherein at

least a first one of the faces of the molded block is substantially planar over substantially

its entire surface area, and at least a second one of the faces has at least one rounded

portion extending toward one side edge of the molded block over at least 1/6 of the at

least one face. Claim 1 calls for the distances between the planar portions of the opposite

faces of the molded block to be substantially equal, whereas Claim 14 calls for the

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molded block to have three sets of opposite faces, wherein the distance between the

planar portions of each set of opposite faces is substantially equal to the distance between

the planar portions of each other set of opposite faces.

The McClintock patent discloses paving material comprising very small cubes

which are designed to be laid as is ordinarily done with broken stone (page 1, lines 34-

36). Specifically, the cubes are two inches on each side (page 1, lines 32, 33) and are not

designed to be laid in a carefully chosen pattern to give a variegated appearance in the

laid paving stone pattern. Instead, the two-inch cubes are dumped from a conveying cart

on a smooth foundation surface and spread out with stone forks or potato hooks (page 1,

lines 36-44). The cubes are then raked together as closely as possible by means of the

forks or rakes and, finally, the spaces between the cubes are filled with pitch, grout,

cement, mortar or other suitable material (page 1, lines 46-50). The resulting paving

stones will have a haphazard orientation relative to one another, and there is no intent in

McClintock for the two-inch cubic paving material to provide an improved or

ornamental appearance.

The Examiner contends that it would have been obvious to provide rounded edges

on the two-inch cubical blocks of the McClintock paving material in order to provide a

more natural appearance to the blocks. However, the paved surface being provided in the

McClintock patent is a utilitarian road surface for both automotive vehicles as well as for

vehicles drawn by animals (page 1, lines 98-109). In contrast, the paving stones of the

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Rinninger '257 patent are for garden walkways (column 1, lines 6-8). Providing a natural appearance is of no concern in the McClintock patent, and a person with ordinary skill in the art would have seen no need for the cubes to be modified so that they provide a more natural appearance. Furthermore, the pitch, grout, cement, mortar or other material filling the spaces between the cubes of McClintock is likely to at least partially cover any rounded corners that might be put on the cubes and, thus, defeat the purpose of achieving a natural appearance like that achieved in the Rinninger '257 patent. A part of the object of the Rinninger '257 patent is a shaping which allows the existence of interspaces between the paving stones laid against one another (column 1, lines 45-49). However, since the 2-inch cubes of McClintock are dumped from a cart and merely raked together and then the spaces between them filled with pitch, grout, cement or the like, the shaping object of the Rinninger '257 invention does not apply to the cubes or pavement of McClintock. One of the advantages of the McClintock patent is the avoidance of the necessity of skilled labor, which is ordinarily required in laying a pavement (page 1, lines 70-72). Considering the different types of surface and the difference in size between the paving stones of the Rinninger patent and the cubical blocks of the McClintock patent, a person with ordinary skill in the art would not have considered applying the teachings of the Rinninger '257 patent to the cubical blocks disclosed in the McClintock patent.

In addition, the haphazard method in which the cubes of McClintock are applied to the foundation surface means that the resulting cubes would have a random orientation Application 140

and would in most cases be oriented without the face having the rounded corners facing

upwardly and, thus, would defeat the purpose of achieving a natural appearance like that

achieved in the Rinninger patent.

Furthermore, even though Rinninger '257 discloses rounded portions extending as

much as 1/6 of the paving stone face on which the rounded portion is formed, there

would have been no incentive for one of ordinary skill in the art to place on the two-inch

blocks of McClintock rounded corners that extend over at least 1/6 of their faces. The

fact that the corners of the McClintock blocks could have been made that way does not

mean that it would have been obvious to do so.

Moreover, Claim 1 calls for at least a first one of the faces of the molded block

being substantially planar over substantially its entire surface area. Two such faces of the

molded block according to the present invention are the face 2 on the top of the block as

shown in Fig. 1a and face 2' shown at the right front in Fig. 1b. In contrast, the Rinninger

'257 patent discloses no face that is substantially planar over substantially its entire

surface area. For example, the plan view of Fig. 2a of Rinninger shows that the top,

bottom, left and right faces of that figure all have at least one rounded portion that keeps

it from being substantially planar. With respect to the surface shown in plan in Fig. 2a, it

can be seen that the corner regions 28-30 each define a clothoid (column 5, lines 20-22),

thereby preventing the surface at the top of Fig. 2b and shown in plan in Fig. 1b from

being a face that is substantially planar over substantially its entire surface area.

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Claim 5 depends on Claim 1 and calls for the radius of curvature of the rounded portion to decrease constantly toward the side edge. Similarly, Claim 18 depends on Claim 14 and calls for the radius of curvature of the rounded portion to decrease constantly toward the side edge. Using the rationale presented above in connection with claims 1 and 14 concerning the unobviousness of placing rounded portions on the two-inch cubes of McClintock, it would have been even more unobvious to make rounded portions having a radius of curvature which decreases constantly toward the side edge. Similarly, with respect to Claims 6 and 19, it would have been even less obvious to form

the two-inch cubes of McClintock with a clothoid extending toward the side edge over

approximately 1/4 to 1/6 of the cube length.

Claim 12 depends on Claim 1 and calls for the molded block to have two opposite faces which are substantially planar over their entire surface areas. Similarly, Claim 22 depends on Claim 14 and calls for the molded block to have two opposite faces which are substantially planar over their entire surface areas. Such opposite, substantially planar faces are, for example, face 2 on the top of the block as shown in Fig. 1a and face 2' shown at the front right in Fig. 1b. In contrast, the Rinninger '257 patent discloses no faces which are substantially planar over their entire surface areas. For example, the plan view of Fig. 2a of Rinninger shows that the top, bottom, left and right faces of that figure all have at least one rounded portion that keeps it from being substantially planar. With respect to the surface shown in plan in Fig. 2a, it can be seen that the corner regions 28-

30 each define a clothoid (column 5, lines 20-22), thereby preventing the surface at the

top of Fig. 2b and shown in plan in Fig. 1b from being a face that is substantially planar

over its entire surface area.

To have modified the two-inch blocks of McClintock to include clothoid corners

at just enough corners to lead to substantially planar faces opposite one another would

have been an improper picking and choosing of certain features from a modifying

reference while leaving others behind. Such a modification would not have been

obvious.

Claim 13 calls for a laid set of blocks comprising molded blocks according to

claim 1, wherein the blocks are laid adjacent to one another in a pattern wherein some of

the blocks have as their upper surfaces faces which are substantially planar over

substantially their entire surface areas. Similarly, Claim 23 calls for a laid set of blocks

comprising molded blocks according to Claim 14, wherein the blocks are laid adjacent to

one another in a pattern wherein some of the blocks have as their upper surfaces faces

which are substantially planar over substantially their entire surface areas. For the

reasons presented above in connection with Claims 1 and 14, it would not have been

obvious to provide on some of the blocks of McClintock et al., as the upper faces of laid

blocks in a pattern, faces that are substantially planar over their entire surface areas.

Furthermore, even if some of the blocks of McClintock et al. had one or more faces that

were substantially planar over their entire surface areas, it would be a matter of chance

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whether such faces ended up facing upward after the blocks were dumped from a cart,

spread out, and then raked together.

2) Whether the Examiner erred in rejecting Claims 3 and 16 under 35

U.S.C. § 103 as being unpatentable over McClintock in view of

Rinninger '257, and further in view of Scheiwiller '417.

Claims 3 and 16 depend on Claims 1 and 14, respectively. Claims 1 and 14 were

treated in Section VIII Argument in the brief filed on January 21, 2004. It is submitted

that Claims 3 and 16 are allowable for the reasons presented in that section, because they

depend on Claims 1 and 14. The Scheiwiller '498 reference, which has been added to the

combination of McClintock and Rinninger '257 in rejecting Claims 3 and 16, does not

provide a teaching which would have rendered obvious the subject matter of Claims 3

and 16.

In the Office Action, the Examiner acknowledges that McClintock, in view of

Rinninger, does not disclose the specific combination of paving stones including

additional blocks that are twice the length or twice the width of the standard stone. As

was pointed out in the Section VIII argument in the earlier brief, McClintock discloses

paving material comprising very small cubes which are designed to be laid as is

ordinarily done with broken stone (page 1, lines 34-36). Specifically, the cubes are two

inches on each side and are dumped from a conveying cart onto a smooth foundation

surface, and spread out with stone forks or potato hooks (page 1, lines 36-44). The cubes

are then raked together as closely as possible by means of the forks or rakes and, finally,

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the spaces between the cubes are filled with pitch, grout, cement, mortar, or other suitable

material (page 1, lines 46-50).

McClintock further states that the form of the cubes ensures that they will always

rest upon their bases (page 1, lines 44-46). Thus, according to McClintock's invention,

when his two-inch blocks are spread out and raked together, they will rest on their bases,

as close together as possible, and thereby form a smooth upper surface. Making some of

the two-inch cubes twice the length and/or twice the width of the other cubes would have

had the result of making it more difficult to rake together the small blocks in a closely

packed arrangement, and would have increased the likelihood that some of the larger

blocks would protrude upward from the surface defined by the other blocks, and thereby

make the surface rougher. As a result of such effects, it would not have been obvious to

one having ordinary skill in the art to make any of the cubes of McClintock longer or

wider than any of the other cubes.

The disclosure of Scheiwiller of large paving stones that are set in place

individually by hand does not provide a teaching that is applicable to the cubes of

McClintock that are handled in bulk - dumped, spread, and raked together.

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3) Whether the Examiner erred in rejecting Claims 3, 4, 16, and 17 under 35 U.S.C. § 103 as being unpatentable over McClintock in view of Rinninger '257, and further in view of Scheiwiller '498.

As was stated above, Claims 3 and 16 depend on Claims 1 and 14, respectively. Claims 4 and 17 also depend on Claims 1 and 14, respectively. Each of Claims 3, 4, 16, and 17 is allowable for the reasons given in connection with their independent claims. The Scheiwiller '498 reference does not provide a teaching that would have rendered obvious any combination of McClintock and Rinninger '257 that would contain all of the subject matter of the claims. Just as it would not have been obvious to take the small cubes of McClintock that are worked in bulk with a rake and/or other tools and modify them to contain some blocks that are twice the length or width of the other blocks, it would not have been obvious to make the small cubes of McClintock as a plurality of differently sized blocks. More specifically, it would not have been obvious to modify the two-inch cubes of McClintock to make some with an oblong/rectangular cross-section in plan view, to make them with a length that is twice the width and height, or to employ some blocks that have the dimensions of four of the cubes lying beside one another. The varying dimensions would increase the difficulty of raking the small blocks tight against one another, and would result in some blocks sticking up from the relatively smooth pavement defined by the other blocks. The fact that Scheiwiller '498 discloses large blocks of a size that are placed next to one another individually, wherein such blocks have a length dimension that differs from a height and width dimension, does not mean Applicant/Appellant: Hans Josef RINNINGER

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that it would have been obvious to use such shapes with small blocks that are handled in

bulk rather than individually. The fact that a modification can be made does not mean

that it would have been obvious to make the modification. The Examiner states that the

set of paving stones of Scheiwiller '498 can be combined in various patterns to form an

appealing surface. However, such patterns would not result, even if the different shapes

disclosed in Scheiwiller '498 were used on the small stones of McClintock. The handling

of the small stones in bulk - dumping, spreading, and raking together of the small stones -

which is an essential characteristic of the McClintock reference, would not have resulted

in any specific patterns even if some stones of different shapes or sizes were included.

The positions of the stones of different sizes or shapes in the pavement as a whole would

be haphazard.

It is respectfully requested that the rejections of the Examiner not be sustained.

Respectfully submitted,

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